### <u>NAVSEA</u> STANDARD ITEM

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ITEM NO: 009-04

DATE: 01 APR 1999

CATEGORY: I

### 1. SCOPE:

1.1 Title: Quality System; provide

# 2. <u>REFERENCES</u>:

- a. ANSI/ISO/ASQC Q10013, Guidelines for Developing Quality Manuals
- b. ISO 10012-1, Quality Assurance Requirements for Measuring Equipment
- c. ANSI/NCSL Z540-1, General Requirements for Calibration Laboratories and Measuring and Test Equipment

### 3. REQUIREMENTS:

- 3.1 Establish, document, and maintain a Quality System to ensure product conformance to Job Order specifications. The system shall, as a minimum, comply with the requirements of ANSI/ASQC Q9002 and all additional contract requirements. The Quality System shall be structured in the Level I, II, and III hierarchy as described in 2.a. The Quality System shall be available for review and be acceptable to the SUPERVISOR. The Contractor shall have an acceptable Quality System, in accordance with this Standard Item, in place to receive an award of a Job Order. The accepted Quality System shall be subject to periodic audits by the SUPERVISOR throughout the contract. The Quality System shall include the following additional requirements, clarifications, and processes for:
- 3.1.1 A corrective **and preventive** action program that provides for prompt correction of defects whether found by the government, contractor, or subcontractor personnel. The program shall require that defects found and reported by the government will get prompt written response indicating corrective action taken or date specific action will be complete. The program shall also provide for identification and correction of the cause of defects in work for which process control procedures are required by the Job Order. A copy of the written response of internal correction actions shall be provided to the SUPERVISOR when requested.
- 3.1.2 Transmittal of all technical, design, and *appropriate* quality requirements to and from the subcontractor or vendor. Quality requirements include the inspections and tests required by the Work Item as well as special

requirements for contractor and government inspection at the subcontractor's or vendor's plant necessary to ensure product conformance. The Contractor shall define the appropriate quality requirements in accordance with ANSI/ASQC Q9002, Paragraph 4.6, and records shall be available to the SUPERVISOR when requested.

- 3.1.2.1 The contractor's purchasing document to a subcontractor or vendor shall contain the following statement when government inspection is requested by the SUPERVISOR: "Government inspection is required prior to shipment from your plant. Upon receipt of this order, promptly notify and furnish a copy to the government representative who normally services your plant so that appropriate planning for government inspection can be accomplished. In the event the government representative or office cannot be located, our purchasing agent shall be notified immediately."
- 3.1.3 Receipt inspection of contractor furnished material (CFM) to ensure compliance with specification Work Item requirements. The process shall include inspection at receipt and control through issue. Perform visual inspection for damage and appropriate markings to ensure correct material, using sampling techniques. Additionally, verification of the following materials shall be based on vendor material test certification data, supplier performance history, or testing using sampling techniques:
  - 3.1.3.1 PLATE: Material greater than 3/8-inch thick.
- 3.1.3.2 SHAPES: Structural items whose cross section measures at least two inches high or two inches wide or 1/4-inch thick.
  - 3.1.3.3 PIPE: All sizes and material, excluding copper.
  - 3.1.3.4 TUBING: All sizes and material, excluding copper.
  - 3.1.3.5 BAR STOCK: Material greater than 3/8-inch.
  - 3.1.3.6 WELDING/BRAZING RODS: All sizes and material.
- 3.1.3.7 FASTENERS: Threaded fasteners 1/2-inch diameter and larger, except wood screws, sheet metal screws, and carriage bolts. Use of black-oxide coated brass threaded fasteners (BOCBTF) is not authorized in the accomplishment of any work under this contract.
- 3.1.3.8 FITTINGS: Welded or brazed fittings, excluding fittings used with copper pipe and tubing.
  - 3.1.4 A calibration system in conformance with 2. $\boldsymbol{b}$  or 2. $\boldsymbol{c}$ .
- 3.2 A separate Inspection Plan shall be developed for each Work Item. An Inspection Plan shall:

- 3.2.1 Be prepared for each Work Item in the Job Order which requires performance of productive work prior to the start of work on that specific Work Item. It shall be revised and updated as work proceeds on each Work Item and shall be available upon request by the SUPERVISOR. Supporting data for inspections or tests requiring government notification (G), including accept/reject criteria, shall be available at the location of accomplishment of each inspection or test.
- 3.2.2 Identify each inspection and test required by the Work Item to substantiate product conformance to the appropriate paragraph of the Work Item. Inspections required by the Work Item to provide a report of conditions found are not required to be included in the Inspection Plan.
- 3.2.3 Provide identification of the item to be inspected by name, number, and location (e.g., number 3 main feed pump, lazarette hatch, galley deck, stable element MK7).
- 3.2.4 Provide identification of each characteristic of the items to be inspected and provide the criteria for acceptance for each characteristic (e.g., air test; two PSIG for 10 minutes; no drop). Acceptance and rejection criteria for inspections to determine initial condition need not be provided in the Inspection Plan unless specifically required by the Work Item.
- 3.3 Maintain legible and indelible records of completed inspections and tests, including those accomplished by subcontractors. The records shall document the specific inspection actions or tests and provide objective quality evidence of the critical measurements and attributes identified in the contractor's inspection plan as the basis for acceptance of the work. The records shall include documentation of rejected work, corrective action taken, and objective quality evidence which the contractor offers as assurance of the conformance to the specifications. Records provided by the subcontractor may be incorporated in the inspection and test documentation or, if maintained as separate documentation, shall be referenced therein and be readily available for review with the Inspection Plan. Records shall include the ship's name and hull number, Job Order and Work Item numbers, date, and signature of the contractor's authorized representative who witnessed or performed the inspection or test.
- 3.3.1 Records shall be maintained at the contractor's facility, at a location accessible on the site of the work required by the Job Order.
- $3.3.2\,$  Records need not include the nature and number of observations.
- 3.3.3 Reports of initial condition of equipment, structure or ship system shall include the appropriate design criteria for each attribute or measurement required by the basic item and provided therein or in references thereto.

- 3.3.4 Contractor's inspection records are an integral part of work. The SUPERVISOR will consider the Work Item incomplete if the contractor's documentation and records are not complete.
- 3.3.5 Record each inspection and test within 24 hours of accomplishment. Records shall be incorporated into the Test and Inspection Plan within 72 hours after completion of each inspection or test.
  - 3.4 Accomplish (I) and (V) inspection/test requirements as follows:
- 3.4.1 (I) and (V) are symbols inserted in a Work Item to establish a point in the sequence of accomplishment of work at which time the contractor shall inspect/verify and document the inspection or test.
- 3.4.1.1 (I) inspections require verification by a separate individual, other than the person who has accomplished the work, qualified as an inspector.
- 3.4.1.2 (V) inspections require verification by either the qualified tradesperson, trade supervisor, or inspector.
- $3.5\,$  Accomplish government notification, identified by the symbol (G), requirements as follows:
- $3.5.1\,$  (G) is a symbol inserted in a Work Item to establish a point in the sequence of accomplishment of work at which time the SUPERVISOR shall be notified to permit observation of a specific inspection or test by the government.
- 3.5.2 Notify the SUPERVISOR's designated representatives at least four hours, but not more than one working day, prior to commencing the specific requirements in the paragraph annotated with the symbol (G). Notify the SUPERVISOR at least 48 hours, but not more than 72 hours, prior to commencing (G) POINTs at contractor's/subcontractor's plants located in excess of 50 miles by the most direct roadway from the contractor's/subcontractor's plant nearest to the place of performance of the contract. Document the date, time, and identification of the SUPERVISOR's representative notified.
- $3.5.3\,$  A qualified contractor representative shall be present to accept or reject inspections or tests annotated with the symbol (G).
- 3.5.4 When the symbol (G) precedes inspections or tests in a Work Item which are applicable to more than one action, the symbol (G) shall identify the action required, e.g., (G) "HYDROSTATIC TEST". When more than one unit is involved, the (G) notification requirement applies to each unit.
- 3.5.5 Notify the SUPERVISOR not later than four hours before the end of the last preceding day shift, when inspections or tests following a (G) POINT are scheduled after normal day shift working hours, on a weekend, or on a federal holiday.

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- 3.5.6 Proceed with the test or inspection if the SUPERVISOR is not present, provided the required advance notice has been furnished to the SUPERVISOR and the contractor has completed and documented the preceding inspections and tests.
- $3.5.7\,$  A partial (G) notification may be accomplished in the event that work cannot be completed and work progress would be delayed in waiting for total completion of work to the (G) notification. Comply with the requirements of  $3.5.2\,$  when the incomplete work is completed and ready for the remainder of the inspection or test. Note partial inspections on the inspection form.
- 3.5.8 Invoke (G) notification requirements for inspections or tests involving a subcontractor in purchase orders or otherwise described such that the requirements of 3.5.2 are met.
- 3.5.9 The qualified contractor's representative shall witness or perform and sign for all inspections and tests within a 50-mile radius of the contractor's plant, nearest to the place of performance of the contract.
- 3.5.9.1 Performance of specific tests and inspections may be delegated to subcontractors who are MSRA and ABR agreement holders and have a current Quality System accepted by the SUPERVISOR. (G) POINT notification requirements shall not be delegated.
- 3.5.10 The contractor may delegate responsibility to subcontractors only for specific tests and inspections performed at plants located outside a 50-mile radius of the contractor's plant, nearest to the place of performance of the contract; however, the (G) POINT notification requirements shall not be delegated.
- 3.5.11 Submit one legible copy of the technical specification portion of those purchase orders, or a report identifying the applicable information, which involve (G) notifications, to the SUPERVISOR prior to the start of work by the contractor/subcontractor.
- 3.5.12 Submit one legible copy of those purchase orders for work being accomplished by contractor/subcontractor located outside a 50 mile radius of the place of contract performance to the SUPERVISOR prior to shipment of purchase order and equipment. For contractors with facilities outside the 50 mile radius, a report identifying the applicable information may be submitted in lieu of a purchase order.
- 3.6 Maintain a current list, for reference by the SUPERVISOR, designating the contractor's qualified inspectors who witness or perform and sign for symbol (I) inspections, indicating the type of tests and inspections for which each inspector is qualified.
- 3.6.1 When subcontractors are delegated responsibility, the subcontractor's qualified inspectors shall be included on this list.

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## 4. NOTES:

- $4.1\,$  ANSI/ASQC Q9001 and Q9002 commercial third party registrar certification is not required.
- $4.2\,$  ANSI/ASQC Q9001 or Q9002 Quality Systems with the additional requirements and clarifications identified in 3.1.1 through 3.1.4, may be used to meet Quality System requirements.
- $4.3\,$  Procedures and Process Control Procedures (NAVSEA Standard Item 009-09) invoked by NAVSEA Standard Items, MIL-STDs, drawings, and specifications are to be submitted and approved independent of the Quality System.